

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-15. (Cancelled)

16. (Currently Amended) A payment terminal device for coupling to a point of sale device, a mobile phone and a payment center, wherein the payment terminal device comprises:

first interface means for releasably coupling said mobile phone to the payment terminal device to transfer data information between said mobile phone and said payment device;

second interface means for coupling said payment terminal device and said payment center, to transfer data information between said payment terminal device and said payment center; and

data processing means coupled to said first and said second interface means for processing data received from said first and said second interface means and for generating data to be sent to said first and/or said second interface means;

wherein said first interface means comprise coupling means for coupling said first interface means to said mobile phone, for transferring data between said mobile phone and said processing means via said first interface means, and

a modem being coupled to said coupling means for converting the data transferred between said mobile phone and said processing means via said first interface means;

wherein data transferred between said processing means and said mobile phone via said modem are transferred between said modem and said mobile telephone as sound data or acoustic data; and

wherein said second interface means comprises means for converting data transferred between second interface device means and said payment center into data being processible by said processing means and said payment center and vice versa.

17. (Previously Presented) A payment terminal device according to claim 16, wherein said data transfer between said mobile phone and said payment terminal device is a one-way data transfer.

18. (Previously Presented) A payment terminal according to claim 16, wherein said coupling means has an acoustic coupler for transferring sound data or acoustic data between said mobile phone and said payment terminal device.

19. (Previously Presented) A payment terminal according to claim 18, wherein the acoustic coupler has a microphone for coupling to a speaker of a mobile phone.

20. (Previously Presented) A payment terminal device according to claim 18, wherein the acoustic coupler has a speaker for coupling to a microphone of the mobile phone.

21. (Previously Presented) A payment terminal device according to claim 19, wherein a distance between said microphone and said speaker is adjustable in order to adapt said acoustic coupler to different types of mobile phones.

22. (Previously Presented) A payment terminal device according to claim 16, wherein the data processing means comprises at least a communication processor having cryptographic capability.

23. (Previously Presented) A payment terminal device according to claim 16, wherein the payment terminal device comprises data input means.

24. (Previously Presented) A payment terminal device according to claim 23, wherein the data input means comprises at least one keyboard.

25. (Previously Presented) A payment terminal device according to claim 16, wherein the payment terminal device comprises a printer.

26. (Previously Presented) A payment terminal device according to claim 16, wherein the payment terminal device comprises a display.

27. (Previously Presented) A payment terminal device according to claim 16, wherein the payment terminal device comprises an interface to a vending machine.

28. (Previously Presented) A point of sale device, with an integrated payment terminal according to claim 16.

29. (Currently Amended) A payment system comprising: a point of sale device with an integrated payment terminal device, a point-of-sale device, a payment center, a mobile phone and mobile cellular telephone network;

wherein said mobile phone is being connected to said payment center via said mobile cellular telephone network;

said payment center and the said payment terminal are being connected via a second direct connection;

the payment terminal device including first interface means for releasably coupling said mobile phone to said payment terminal device to transfer data information between said mobile phone and said payment device, second interface means for coupling said payment terminal device and said payment center to transfer data information between said payment terminal device and said payment center, data processing means coupled to said first and said second interface means for processing data received from said first and said second interface means and for generating data to be sent to said first and/or said second interface means, said first interface means comprising a coupling means for coupling said first interface means to said mobile phone for transferring data between said mobile phone and said processing means via said first interface means, a modem coupled to said coupling means for converting the data transferred between said mobile phone and said processing means via said first interface means, data transferred between said processing means and said mobile phone via said modem being transferred between said modem and said

mobile telephone as sound data or acoustic data; and said second interface means comprises means for converting data transferred between second interface device and said payment center into data processible by said processing means and said payment center and vice versa, and wherein
data transferred between said payment terminal and said mobile phone are transferred as sound data or acoustic data.

30. (Previously Presented - Withdrawn) A method for performing a payment procedure by using the payment system of the present invention, said method comprising:

setting up a connection from the mobile phone to the payment center via the mobile voice network;

identifying the user at the payment center using the caller identity to establish and decide whether the caller is a registered user of the system;

putting the mobile telephone onto the acoustic coupler of the coupling means of the payment terminal device;

transferring the required transaction data or payment data from the payment center via the voice channel established by the mobile telephone to the payment terminal;

then verifying if the transaction data correspond to the specifications on the user's account by the payment center and approving or rejecting the transaction via the second direct connection between the payment center and the payment terminal.

31. (Previously Presented) A payment terminal according to claim 16, wherein said coupling means has an acoustic coupler for transferring sound data or acoustic data between said mobile phone and said payment terminal device.

32. (Previously Presented) A payment terminal device according to claim 31, wherein the acoustic coupler has a speaker for coupling to a microphone of the mobile phone.

33. (Previously Presented) A payment terminal device according to claim 20, wherein a distance between said microphone and said speaker is adjustable in order to adapt said acoustic coupler to different types of mobile phones.

34. (Previously Presented) A payment terminal device according to claim 17, wherein the data processing means comprises at least a communication processor having cryptographic capability.

35. (Previously Presented) A payment terminal device according to claim 18, wherein the data processing means comprises at least a communication processor having cryptographic capability.